

## **CLAIMS**

What is claimed is:

1. A projectile retrieval system comprising:

at least one projectile deceleration area for decelerating projectiles;

a transport mechanism disposed in communication with the projectile deceleration area, the transport mechanism having an elongate screw configured for carrying projectiles from the deceleration area to a remote location.

2. The projectile retrieval system of claim 1, further comprising a container disposed in communication with the transport mechanism for receiving projectiles from the transport mechanism.

3. The projectile retrieval system of claim 1, further comprising a motor for rotating the elongate screw.

4. The projectile retrieval system of claim 1, further comprising a manual crank for rotating the elongate screw.

5. The projectile retrieval system of claim 1, wherein the elongate screw has a central axis and at least one fin extending helically about the central axis in a first direction.

Randall E. Bateman, P.C.  
10 W. 100 South, Suite, 425  
P.C. Box 1319  
Salt Lake City, UT 84110  
(801) 539-1900

6. The projectile retrieval system of claim 5, further comprising at least one fin extending helically about the central axis in a second direction.

7. The projectile retrieval system of claim 1, further comprising at least one valve disposed between the deceleration area and the transport mechanism.

8. The projectile retrieval system of claim 7, wherein the at least one valve includes a valve having a first, closed position and a second, open position, and wherein the retrieval system further comprises a valve actuator for selectively moving the valve from the first, closed position to the second, open position.

9. The projectile retrieval system of claim 8, wherein the valve actuator is disposed in communication with a remote control input for selectively causing the valve actuator to move the valve between the first, closed position, and the second, open position.

10. The projectile retrieval system of claim 8, wherein the valve actuator is disposed in communication with an automatic detection sensor that senses the presence or absence of projectiles in the deceleration area and that causes the valve actuator to move

the valve between the first, closed position, and the second, open position.

11. The projectile retrieval system of claim 1, further comprising a vacuum system for generating negative air pressure in the transport mechanism independent of the elongate screw.

12. The projectile retrieval system of claim 1, wherein the transport mechanism comprises a housing which is substantially airtight independent of connection to the bullet deceleration area.

13. A projectile retrieval system comprising:

a plurality of bullet deceleration areas disposed in a generally linear array;

a transport housing disposed in communication with the plurality of bullet deceleration areas for receiving bullets therefrom; and

a screw drive disposed in the transport housing for moving bullets through the housing.

14. The projectile retrieval system of claim 13, wherein the transport housing is substantially airtight other than its communication with the bullet deceleration area.

15. The projectile retrieval system of claim 13, further comprising at least one control member disposed between one of the bullet deceleration areas and the transport housing for selectively preventing bullets from entering the transport housing.

16. The projectile retrieval system of claim 15, further comprising a remote control for selectively opening the at least one control member.

17. The projectile retrieval system of claim 14, further comprising a vacuum system disposed in communication with the transport housing for selectively moving lead dust through the transport housing.

18. A method for retrieval of projectiles from a bullet containment area, the method comprising;

- a) passing a bullet from a bullet deceleration area into a transport housing;
- b) rotating an elongate screw to move the bullet from adjacent the bullet deceleration area to a remote location; and
- c) depositing the bullet in a container.

19. The method according to claim 18, wherein the method comprises selectively holding the bullet in the deceleration area.

20. The method according to claim 18, wherein the method comprises developing a negative pressure in the transport housing to move lead dust through the transport housing independent of the elongate screw.

21. The method according to claim 18, wherein the method comprises selectively applying a negative pressure to a bullet deceleration area to draw lead dust out of the bullet deceleration area.